



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,535	08/08/2008	Shigeo Okeya	88556.0030	1461
26021	7590	05/31/2011	EXAMINER	
Hogan Lovells US LLP 1999 AVENUE OF THE STARS SUITE 1400 LOS ANGELES, CA 90067			SEOH, MINNAH L	
			ART UNIT	PAPER NUMBER
			3686	
			NOTIFICATION DATE	DELIVERY MODE
			05/31/2011	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LAUSPTO@hhlaw.com  
robert.gruwel@hoganlovells.com  
dcptopatent@hoganlovells.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,535	<b>Applicant(s)</b> OKEYA, SHIGEO	
	<b>Examiner</b> MINNAH SEOH	<b>Art Unit</b> 3686	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :29 September 2006; 7 December 2006; 25 September 2007

## **DETAILED ACTION**

### ***Status of Claims***

1. This action is in reply to the Application filed on 8 August 2008.
2. Claims 1-13 are currently pending and have been examined.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 1 recites "control unit monitors for an event of change in operation of an electronic part mounted in the bearing display apparatus and updates display of the information of the bearing on the display unit in accordance with an occurrence of the event." From reading the Disclosure, Examiner believes that Applicant's invention is directed towards a method for adjusting the magnetic sensor depending on the current location of a magnetic switch in a cell phone housing. This is not currently reflected in the claims. In particular, the "change in operation of an electronic part" is not currently understood to be a magnetic switch. During prosecution, the broadest reasonable interpretation is used. For purposed of examination, a "change in operation of an electronic part" is interpreted to be any change in any state of any part of the apparatus. For example, if the apparatus is moved, this would be a change the signal received by

the electronic sensor part of a GPS apparatus. Appropriate clarification and correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2 and 5-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Knockheart et al. (US 2003/0018428).

**CLAIM 1 –**

As per claim 1, Knockheart et al. discloses an apparatus having the limitations of:

- A bearing display apparatus provided with
  - a geomagnetic sensor for detecting earth-magnetism (***Sensors 230 also includes a magnetic compass 234 see par. [0116] of Knockheart et al.***)
  - a display unit (***the in-vehicle system displays the spot map see par. [0099] of Knockheart et al.***), and
  - a control unit for calculating a geographical bearing (***Server system 125 uses the information provided by the in-vehicle system related to the location of the vehicle 690 to determine the starting latitude and***

***longitude of the vehicle. Based on the vehicle's latitude and longitude, speed and heading, the server system finds the vehicle's starting link in its graph representation of the road network see par. [0088] of Knockheart et al.)*** based on detection values of the geomagnetic sensor (***Sensors 230 also includes a magnetic compass 234 which provides a signal to onboard computer 210 encoding the orientation of the vehicle see par. [0116] of Knockheart et al.)*** and making said display unit display the information of the calculated bearing (***The in-vehicle system begins providing initial guidance commands and displaying the spot map around the starting location to the operator as soon as it is downloaded see par. [0098] of Knockheart et al.)***)

- wherein said control unit monitors for an event of change in operation of an electronic part mounted in the bearing display apparatus (***The dead reckoning uses the locations of the maneuver and way points along the planned route and information from the vehicle sensors, in particular, from the velocity sensor, to update this second location estimate see par. [0188] of Knockheart et al.)*** and updates display of the information of the bearing on the display unit in accordance with an occurrence of the event (***the server system downloads a route as a sequence of links joined by maneuver points, and downloads spot***

***maps as small graphs around the starting location or the selected maneuver points see par. [0258] of Knockheart et al.)***

**CLAIM 2 –**

Knockheart et al. teach the apparatus of claim 1 as described above. Knockheart et al. further disclose an apparatus having the limitations of:

- wherein said electronic part has a storage medium loading unit in which a storage medium can be loaded, and said change in operation is a change in a loaded state of said storage medium in said storage medium loading unit (***static storage 222 in onboard computer 210 in in-vehicle system 105 is a removable device...Updating the in-vehicle system involves replacing storage device 222 with another storage device 222a that has been preloaded with an updated version of the databases see par. [0365]-[0366] of Knockheart et al.)***)

**CLAIM 5 –**

Knockheart et al. teach the apparatus of claim 1 as described above. Knockheart et al. further disclose an apparatus having the limitations of:

- wherein said electronic part has a luminance changing unit for changing a display luminance of said display unit and/or an audio processing unit for outputting audio, and said change in operation is a change in said display luminance or

occurrence of presence of audio output (***devices 240 also include a voice output device 246. Voice output device 246 provides audio output of speech commands see par. [0120] of Knockheart et al.***)

**CLAIM 6 –**

Knockheart et al. teach the apparatus of claim 1 as described above. Knockheart et al.

further disclose an apparatus having the limitations of:

- wherein said electronic part has a wireless communicating means able to connect to a communication network (***a wireless communication system see par. [0038] of Knockheart et al.***), and said change in operation is a change in operation/nonoperation of said wireless communicating means (***Instead, the starting location is used to determine the spot map that is downloaded to the vehicle see par. [0238] of Knockheart et al.***)

**CLAIM 7 –**

Knockheart et al. teach the apparatus of claim 6 as described above. Knockheart et al.

further disclose an apparatus having the limitations of:

- wherein said apparatus is further provided with a position information acquiring unit for acquiring information relating to a geographical location of a current position, and said control unit acquires map information of surroundings of a current position, specified based on position information acquired at said position information acquiring unit, from said communication network via said wireless



communicating unit, and performs processing for displaying said map information together with the information of the bearing on said display unit (***Instead, the starting location is used to determine the spot map that is downloaded to the vehicle see par. [0238] of Knockheart et al.***), and monitors for said change in operation while displaying said map information (***the server system downloads a route as a sequence of links joined by maneuver points, and downloads spot maps as small graphs around the starting location or the selected maneuver points see par. [0258] of Knockheart et al.***)

**CLAIM 8 –**

Knockheart et al. teach the apparatus of claim 7 as described above. Knockheart et al. further disclose an apparatus having the limitations of:

- wherein said map information is a predetermined size, and if a current position specified based on said position information is at an end region of said map information, said control unit controls said wireless communicating unit so as to acquire map information adjoining to said end region while displaying said map information on said display unit (***While traveling to the destination, the in-vehicle system attempts to track the location of the vehicle. As the in-vehicle system determines that the vehicle is approaching each maneuver point, it provides aural and graphical instructions to the operator regarding the action to take at that maneuver point. If a spot map has been downloaded for the maneuver, the in-vehicle system displays the spot map***

***in addition to, or instead of, the graphical instructions see par. [0099] of Knockheart et al.)***

**CLAIM 9 –**

Knockheart et al. teach the apparatus of claim 6 as described above. Knockheart et al. further disclose an apparatus having the limitations of:

- wherein said control unit controls said wireless communicating unit to perform processing for call reception or mail reception while displaying said map information on said display unit (***To poll a vehicle, the server system places a cellular telephone call, or otherwise notifies the vehicle, the in-vehicle system. The in-vehicle system receives the call and provides its logged speed data see par. [0347] of Knockheart et al.)***)

**CLAIM 10 –**

Knockheart et al. teach the apparatus of claim 1 as described above. Knockheart et al. further disclose an apparatus having the limitations of:

- wherein said control unit corrects the information of the bearing in accordance with a change in operation so as to update the display (***The dead reckoning uses the locations of the maneuver and way points along the planned route and information from the vehicle sensors, in particular, from the velocity sensor, to update this second location estimate see par. [0188] of Knockheart et al.)***)

**CLAIM 11 –**

Knockheart et al. teach the apparatus of claim 10 as described above.

Knockheart et al. further disclose an apparatus having the limitations of:

- wherein said control unit performs predetermined correction on detection values of said geomagnetic sensor detected at the time of occurrence of a change in operation, and corrects the information of the bearing based on the corrected values so as to update the display (***The dead reckoning uses the locations of the maneuver and way points along the planned route and information from the vehicle sensors, in particular, from the velocity sensor, to update this second location estimate see par. [0188] of Knockheart et al.***)

**CLAIM 12 –**

Knockheart et al. teach the apparatus of claim 1 as described above. Knockheart et al.

further disclose an apparatus having the limitations of:

- wherein said control unit monitors for a change in operation for a plurality of electronic parts and corrects the information of the bearing in accordance with the type of change of operation (***The dead reckoning uses the locations of the maneuver and way points along the planned route and information from the vehicle sensors, in particular, from the velocity sensor, to update this second location estimate see par. [0188] of Knockheart et al.***)

**CLAIM 13 –**

As per claim 1, Knockheart et al. discloses an method having the limitations of:

- a step of calculating a geographical bearing based on detection values of the geomagnetic sensor (***Sensors 230 also includes a magnetic compass 234 see par. [0116] of Knockheart et al.***)
- a step of making said display unit display information of the calculated bearing (***Server system 125 uses the information provided by the in-vehicle system related to the location of the vehicle 690 to determine the starting latitude and longitude of the vehicle. Based on the vehicle's latitude and longitude, speed and heading, the server system finds the vehicle's starting link in its graph representation of the road network see par. [0088] of Knockheart et al.***)
- a step of monitoring for a change in operation of an electronic part (***The dead reckoning uses the locations of the maneuver and way points along the planned route and information from the vehicle sensors, in particular, from the velocity sensor, to update this second location estimate see par. [0188] of Knockheart et al.***)
- a step for updating the display of the information of said bearing on said display unit in accordance with an occurrence of said change in operation (***the server system downloads a route as a sequence of links joined by maneuver points, and downloads spot maps as small graphs around the starting***

***location or the selected maneuver points see par. [0258] of  
Knockheart et al.)***

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knockheart et al. (US 2003/0018428) in view of Bell et al. further in view of Walters et al.

**CLAIM 3 –**

1

- wherein said apparatus is provided with two housings connected through a movement mechanism, at least one of the housings having said display unit, said electronic part has a detection unit for detecting an operating state of said

movement mechanism, and said change in operation is a change in detection of said detection unit (***This can be achieved by using magnetic switch 150 that can toggle upon sliding over a magnet see par. [0033] of Bell et al.***)

**Bell et al.** teaches the above. It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the apparatus of Knockheart et al. to include mobile phone housing including a magnetic switch as taught by Knockheart et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the apparatus of Knockheart et al. in this way since integrating gps capability into cellular phone models was well known in the art and desirable in order to minimize the number of devices a person would need to carry (***The portable and/or handheld electronic devices described herein include multipurpose devices, e.g. PDAs, cell phones and other intelligent appliances/apparel of the like see col. 8 ll. 38-4 of Walters et al.***).

#### CLAIM 4 –

3

- wherein said movement mechanism has a plurality of operating states differing in orientation of said display unit with respect to said other housing, and said control unit corrects the information of the bearing on the change in orientation of said display unit in accordance with a change in detection so as to perform said update of the display ( see ***Fig. 5A-D of Bell et al.***)

**Bell et al.** teaches the above. It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the apparatus of Knockheart et al. to include mobile phone housing including a magnetic switch as taught by Knockheart et al. One of ordinary skill in the art at the time of the invention would have been motivated to expand the apparatus of Knockheart et al. in this way since integrating gps capability into cellular phone models was well known in the art and desirable in order to minimize the number of devices a person would need to carry (***The portable and/or handheld electronic devices described herein include multipurpose devices, e.g. PDAs, cell phones and other intelligent appliances/apparel of the like see col. 8 ll. 38-4 of Walters et al.***).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINNAH SEOH whose telephone number is (571) 270-7778. The examiner can normally be reached on 9:00 AM - 4:00 PM Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry O'Connor can be reached on (571) 272-6787. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or (571) 272-1000.

/M. S./  
Patent Examiner, Art Unit 3686

/Gerald J. O'Connor/  
Supervisory Patent Examiner  
Group Art Unit 3686